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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,714

10/07/2005

Christian Schafer

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23460 7590 12/21/2007  
LEYDIG VOIT & MAYER, LTD  
TWO PRUDENTIAL PLAZA, SUITE 4900  
180 NORTH STETSON AVENUE  
CHICAGO, IL 60601-6731

EXAMINER

BADR, HAMID R

ART UNIT

PAPER NUMBER

4174

MAIL DATE

DELIVERY MODE

12/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,714	<b>Applicant(s)</b> SCHAFFER ET AL.	
	<b>Examiner</b> HAMID R. BADR	<b>Art Unit</b> 4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/10/2004</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Drawings Objection***

The drawings filed by the applicant are objected to for lack of clarity/quality. Figures 1-3 have handwritings on them and Figures 4-5 have hand writings. Additionally, in Fig. 4 and Fig. 5 the column on the right has lines separating the items. These lines are not straight lines and look like streaking of a copy process. These drawings should be replaced.

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 11 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 11 provides for the use of the protein preparation, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walsh (US 4,309,344) in view of Nielsen et al. (US 5,989,600).

7. Walsh discloses a process for the production of a protein isolate from defatted vegetable protein material (Abstract).

8. He outlines the process in which the soybeans or vegetable protein material are preferably defatted and the oil is extracted to leave the soybean meal or flakes. It is preferable to remove the oil by solvents such as hexane or azeotropes which have been conventional for the oil extraction (Col. 4, lines 25-34).

9. He teaches grinding the vegetable protein material (soybean flakes) which includes protein, sugars, fibers and other materials and placing the flakes in an aqueous bath at a pH of about 6.5 and preferably between 7.0 and 10.0. To elevate the

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pH of the solution sodium hydroxide, potassium hydroxide and calcium hydroxide may be used if desired (Col. 4, lines 40-52).

10. He discusses that a pH of above about 7.0 is generally preferred for a better solubilization of proteins (Col. 4, lines 54-60).

11. Walsh teaches the ratio of the extractant to the vegetable protein material to be between 5-20 to 1 and preferably 10:1 (Col. 4, lines 6—63).

12. He discloses the extraction temperature at ambient to 120F and preferably at 90F. (Col. 5, lines 5-7).

13. He adds that the time required for the extraction may be from 5 to 120 minutes and preferably 30 minutes (Col. 5, lines 10-12).

14. He discloses a second extraction of the insoluble and residual solids from the first extraction step (Col. 5, lines 15-17).

15. He teaches adjusting the pH of the combined extracts from first and second extractions to preferably between 4.4 and 4.6 which can be done using common food grade acid reagent (Col. 5, lines 48-63).

16. Walsh teaches neutralizing the precipitate to about pH 7.0 before drying it to obtain a neutral dried product (Col. 6, lines 27-31).

17. Walsh recommends spray drying the protein product for a highly water dispersible product (Col. 5, lines 45-51).

18. Walsh is silent regarding the lipase treatment of the isolated protein.

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19. Nielsen teaches treating the vegetable protein source with an efficient amount of one or more enzymes selected from the group consisting of lipolytic enzymes (Col. 5, lines 19-21).

20. They teach using any triacylglycerol lipase for the treatment of the vegetable protein source (EC 3.1.1.3) (Col. 5, lines 27-28).

21. They discuss that the proteinaceous vegetable subjected to the method of their invention may be provided in any form including soybeans, defatted soy flakes, soy meal, soy concentrate and isolate (Col. 2, lines 54-60).

22. They teach inactivating the enzyme by heating the mixture to above 85°C. (Col. 3, lines 26-30)

23. Nielsen et al. disclose that the vegetable protein source may be a legume, a cereal, a composite plant or a crucifera. Legume sources may be soy bean, faba bean, pea and lupine. Cereal sources may be wheat, corn, barley, rye, oat, rice, sorghum, sesame. Composite plant may be sunflower and crucifera may be rape seed (Col. 2, lines 42-52).

24. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the teachings of Walsh by treating the plant protein with lipase as taught by Nielsen. One would have done so to reduce the residual lipid content of the protein material by hydrolyzing it and subsequently extracting it from the protein material causing an organoleptic improvement in the product. Absent any evidence to contrary and based on the teachings of the combined cited references,

there would have been a reasonable expectation of success in producing a product with a lower lipid content.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAMID R. BADR whose telephone number is (571)270-3455. The examiner can normally be reached on M-F 7:30-5:00 ET (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 5712721515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 4174

Hamid R Badr  
Examiner  
Art Unit 4174

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